



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,888	04/20/2005	Shinkichi Ikeda	MAT-8683US	5896
23122	7590	10/18/2007		
RATNERPRESTIA P O BOX 980 VALLEY FORGE, PA 19482-0980			EXAMINER NOORISTANY, SULAIMAN	
			ART UNIT 2146	PAPER NUMBER
			MAIL DATE 10/18/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/531,888

Applicant(s)

IKEDA ET AL.

Examiner

Sulaiman Nooristany

Art Unit

2146

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____                                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/20/2005</u> .  | 6) <input type="checkbox"/> Other: ____                           |

***Detailed Action***

This Office Action is response to the application (10/531888) filed on 20 April 2005.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a), which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jenson U.S Patent App. No. US 20020186653 in view of Frelechoux US 20020023163.**

**Regarding claim 1, Jenson teaches wherein a router setting method comprising:**  
**a step for a first router device for executing a virtual router process for operating,**  
**virtually as one router device, a plurality of router devices connected to a local area**  
**network (A VRRP router is configured to run the VRRP in conjunction with one or**  
**more other routers attached to a network, such as a local area network (LAN) --**  
**Page. 1, [0009]; Fig. 1, unit --100), to send information to a second router device (Fig.**  
**3, unit 302 – receive routing information for a first network node “router” at a**  
**second network node “router”).**

With respect to claim 1, Jenson teaches the invention set forth above except for the claimed “a step for the second router device to receive the information; wherein, the

*method further comprises a step for the second router device to make a setting required for the virtual router process, on a basis of the information; and wherein the second router is a mobile router device newly connected to the local network; and the information is information required for the virtual router process."*

Frelechoux teaches that it is well known wherein a step for the second router device to receive the information **(MR1 receives IP information – Page. 4, [0044]);**

wherein, the method further comprises a step for the second router device to make a setting required for the virtual router process, on a basis of the information **(MR1 can than dynamically configure an OSPF interface with R2 – Page. 4, [0044]);** and

wherein the second router is a mobile router device newly connected to the local network **(when a connection to the fixed network (e.g. LAN) is established, mobile router MR1 can peer with the fixed network router – Page.4, [0044]);** and

the information is information required for the virtual router process **("when mobile network MS1 makes a satellite connection with access point S2, mobile router MR1 receives IP information (e.g. IP address, ATM address, OSPF area) from fixed network router R2. MR1 can then dynamically configure an OSPF interface with R2" – Page. 4, [0044])**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jenson's invention by adding a mobile router (not fixed) which is represented a new connected router into the network. Also, Routers in the same broadcast domain or at each end of a point-to-point link form adjacencies when

Art Unit: 2146

they have detected each other. This detection occurs when a router "sees" itself in a hello packet. This is called a two way state and is the most basic relationship. The routers elect a *designated router* (DR) and a *backup designated router* (BDR) which act as a hub to reduce traffic between routers. OSPF uses both unicast and multicast to send "hello packets" and link state updates as taught by Frelechoux.

**Regarding claim 2**, Jenson and Frelechoux together taught a router setting method according to claim 1, as described above. Jenson further teaches wherein a step for the newly connected second router device to request information to the first router device, the first router device, received the request, sending the information to the second router device **(The second network node may send a request to route information intended for the first network node to the second network node, Page. 3, [0023])**.

Frelechoux further teaches the above limitation **("when mobile network MS1 makes a satellite connection with access point S2, mobile router MR1 receives IP information from fixed network router R2"— Page. 4, [0044])**.

**Regarding claim 3**, Jenson and Frelechoux together taught a router setting method according to claim 1, as described above. Jenson further teaches wherein the first router device sends the information at a regular interval **(The active network node may periodically send a control message to the second network node, Page. 1, [0010])**.

Frelechoux further teaches the above limitation **(the switch logic could automatically supply the IP information to the router, e.g. at intervals or in response to an event such as a change in the PNNI topology or receipt of new PAR PTSEs from the network – Page. 3, [0021])**.

**Regarding claims 4, 5, & 6** Jenson and Frelechoux together taught a router setting method according to claim 1, as described above. Jenson further teaches wherein the information includes a virtual router identifier, a virtual IP address and a virtual MAC address **((virtual Internet Protocol (IP) address, Col. 1, [0009], medium access control (MAC) network address, Page. 1, [0010])**.

**Regarding claim 7**, Jenson teaches wherein a router device comprising:  
a virtual router processing section for operating, virtually as one router device, a plurality of router devices connected to a local area network **(A VRRP router is configured to run the VRRP in conjunction with one or more other routers attached to a network, such as a local area network (LAN) -- Page. 1, [0009]; Fig. 1, unit --100)**;

With respect to claim 1, Jenson teaches the invention set forth above except for the claimed *"a receiving section for receiving information sent from another router device, the information is information required for the virtual router process; and*

*a virtual router information processing section for making a setting required for the virtual router process, on a basis of the information;*

*wherein the router device is a mobile router device newly connected to the local area network."*

Frelechoux teaches that it is well known wherein a receiving section for receiving information sent from another router device, the information is information required for the virtual router process (**MR1 receives IP information – Page. 4, [0044]**); and

a virtual router information processing section for making a setting required for the virtual router process, on a basis of the information (**MR1 can than dynamically configure an OSPF interface with R2 – Page. 4, [0044]**);

wherein the router device is a mobile router device newly connected to the local area network (**when a connection to the fixed network (e.g. LAN) is established, mobile router MR1 can peer with the fixed network router – Page.4, [0044]**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jenson's invention by adding a mobile router (not fixed) which is represented a new connected router into the network. Also, Routers in the same broadcast domain or at each end of a point-to-point link form adjacencies when they have detected each other. This detection occurs when a router "sees" itself in a hello packet. This is called a two way state and is the most basic relationship. The routers elect a *designated router* (DR) and a *backup designated router* (BDR) which act as a hub to reduce traffic between routers. OSPF uses both unicast and multicast to send "hello packets" and link state updates as taught by Frelechoux.

**Regarding claim 8**, Jenson and Frelechoux together taught a router device according to claim 7, as described above. Jenson further teaches wherein the virtual router information processing section further executes, in a predetermined timing, a process to request for the information (**"Router may be configured to determine whether it has received the control information for router during a predetermined time interval"-- Page. 3, [0023]**).

**Regarding claim 9**, Jenson and Frelechoux together taught a router device according to claim 8, as described above. Jenson further teaches wherein the predetermined timing is at a time the information processing section detects a connection to the local area network (**Fig. 1, (102, 104, 108, 106), A VRRP router is configured to run the VRRP in conjunction with one or more other routers attached to a network, such as a local area network (LAN) -- Page. 1, [0009]**).

**Regarding claim 10**, Jenson and Frelechoux together taught a router device according to claim 7, as described above. Jenson further teaches wherein an instruction input section where a request instruction for virtual router information is to be made from a user, to execute a process for requesting for virtual router information when the virtual router information processing section is inputted with the instruction (**"As shown in FIG. 2, system includes a processor, an input/output (I/O) adapter, an operator interface, a memory and disk storage. Memory may store computer program instructions and data. The term "program instructions" may include computer**



**code segments comprising words, values and symbols from a predefined computer language. I/O adapter communicates with other devices and transfers data in and out of the computer system over connection” -- Page. 2,[0014]).**

**Regarding claim 11, 12, 12 & 14, Jenson and Frelechoux together taught a router device according to claim 7, as described above. Jenson further teaches wherein the virtual router information processing section, when receiving a request for the information, further executes a process to send the information being set as a response thereto to the router sending the request (“The active network node may periodically send a control message to the standby (second node) network node. The control message may inform the standby (second node) network node that the active network node is active or in operation” -- Page. 1, [0010]).**

**Regarding claim 15, Jenson and Frelechoux together taught a router device according to claim 7, as described above. Jenson further teaches wherein the information processing section sends the information at a regular interval (The active network node may periodically send a control message to the standby network node -- Page. 1, [0010], The second network node may determine whether it receives control information from the first network node during a predetermined time interval at -- Page. 3, [0023]).**

Frelechoux further teaches “the switch logic could automatically supply the IP information to the router, e.g. at intervals or in response to an event such as a

Art Unit: 2146

**change in the PNNI topology or receipt of new PAR PTSEs from the network” –**

**Page. 3, [0023]).**

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sulaiman Nooristany whose telephone number is (571) 270-1929. The examiner can normally be reached on M-F from 9 to 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu, can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the

Art Unit: 2146

PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sulaiman Nooristany

10/15/2007

A handwritten signature in black ink, appearing to read 'Jeffrey PWU', is located above the printed name.

JEFFREY PWU  
SUPERVISORY PATENT EXAMINER